620.5
WE
v.9
cop.3

17071
173
see

# INDEX TO VOLUME 9

# METAL TRADES

## January to December, 1918


Page

**A**

Accidents in the metal industries, causes and prevention of ..... 498
Accidents on construction work in California..... 27
Accidents, railroad, causes of fatalities in..... 96
Accounting, construction, cost-keeping and.....
G. Ed Ross.... 63
Acetylene, effect on metals of..... 66
Acid-process for sewage disposal ..... 276
Aerial mail-service between Washington and New York, establishment of .....Editorial.... 129
Aeroplane, proposed transcontinental flight in..... 467
Aeroplanes, cost of operating..... 358
Aeroplanes for carrying mail.....Editorial.... 85
Air-compressor, testing an.....Walter S. Weeks.... 187
Aircraft production ..... 305
Alaskan railroad, construction of.....Editorial.... 171
Alkali soils, effect of, upon the durability of cement-tile and concrete blocks ..... 77
Alligator pair, the ..... 412
Alloy-steels in use on the Pacific Coast, special.....
H. G. Bain.... 502
American big guns ..... 184
American Foundrymen's Association, convention of, at Milwaukee, impressions from the .....
C. M. Henderson.... 503
American Foundrymen's Association, convention of, at Milwaukee ..... 459
Americanization, need of, both as a War and as a Peace measure ..... 229
American Society of Civil Engineers, proposed revision of constitution of.....Editorial.... 43
Ammonia, by-product, from coking ..... 190
Ammonia for fire-extinguishing.....A Schleimer.... 148
Announcement of change of name from 'Western Engineering' to 'Metal Trades'.....Editorial.... 340
Apprentice question, the ..... 504
Arc-welding for repairing car-wheels ..... 32
Australia, united engineering society for..Editorial.... 171
Automobile busses.....Review of the Month.... 300
Automobile radiators, anti-freezing solutions for..... 243
Automobiles in the United States in 1917..... 143
Automobile-tires, standard sizes established for..... 325

**B**

Balmorrhea irrigation project, the..V. L. Sullivan.... 53
Bank credit and bond issues..... 162
Bartlesville, Oklahoma, U. S. Bureau of Mines, experiment station at .....Editorial.... 43
Bascule bridge across Oakland estuary, construction of, postponed until after the War.....
Review of the Month.... 257
Bed-time tales ..... 464
Belt-splices, length of ..... 245
Blasting boulders, methods of ..... 74
Blasting methods at Ajo.....S. U. Champe.... 326
Blasting tunnel, at Chuquicamata...E. E. Barker.... 366
Boiler efficiencies with various types of fuel.....
William Kent.... 117
Boiler-plate, the oxy-acetylene process for welding.... 185
Bolshevism, food-saving and .....Editorial.... 472
Bond issue proposed for highway system in Merced county, California...Review of the Month.... 342
Bond issues, bank credit and..... 162
Bond-issues, long-lived, for short-lived improvements. 110

Page

Bond-issues, regulation of, by Federal Reserve Board.
Review of the Mouth.... 88
Book of a thousand excuses for all persons connected with the foundry trade—Chapter IX..... 417
Ditto—Chapter X..... 507
Book reviews:
Chemical analysis of iron..... 291
Coal catechism ..... 332
Concrete engineer's handbook ..... 331
Elements of electrical engineering ..... 373
Elements of fuel-oil and steam engineering..... 375
Elements of western water law..... 79
Everyman's chemistry ..... 249
Handbook of hydraulics ..... 205
Heat ..... 79
Kiln-drying of lumber, the..... 78
Modern management applied to construction..... 374
Petroleum geology of Wyoming ..... 205
Popular oil geology ..... 205
Ports and terminal facilities ..... 374
Powdered coal as a fuel..... 332
Principles of iron founding..... 374
Relief from floods ..... 205
Second annual report of the State oil and gas supervisor of California ..... 374
Treatise on applied chemistry ..... 205
Treatise on the elements of electrical engineering. 79
Treatise on roads and pavements..... 204
Union labor in peace and war..... 516
Vaporizing of paraffin for high-speed motors (electric-ignition type) ..... 373
Brick piers, the strength of.....203
Bridge across Oakland estuary, construction of, postponed until after the War.....
Review of the Month.... 257
Bridge construction, concrete, recommended practice for ..... 284
Bridges, economics of long-span.....
Charles Evan Fowler.... 239
Bridges, long-span, in America..... 96
Bridges, steel-arch, economics of..... 179
Brine on reinforced concrete, influence of..... 150
Brinell meter, the ..... 35
Buildings, construction of emergency for War Department ..... 314
Built-in guards for machinery..John R. Brownell.... 398
Bureau of Mines experiment station at Bartlesville, Oklahoma .....Editorial.... 43
Burnham submerged orifice, the ..... 290

**C**

Cabinet officials and the high cost of living.....
Editorial.... 472
Calaveras dam, failure of part of the..... 173
Calaveras dam, the .....Editorial.... 130
Calcium sulphate, effect of, on cement..... 76
Californian oil production, single report to be issued in place of two.....Review of the Month.... 257
California Iron Yards Co., plant of the..... 423
Californian oil statistics for 1917..... 262
Californian oil statistics for May.....Editorial.... 298
California State Mining Bureau, co-operation between, and oil-operators ....Review of the Month.... 88
Calking machine, a pneumatic ..... 264
Calker, pneumatic, for wooden ships..... 421


Generated on 2024-09-30 01:34 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page
Calol cutting compound ..... 419
Canal banks, hydraulic sluicing for blanketing .....
R. B. Stevens.... 147
Cape-to-Cairo time-table ..... 162
Carbon content of steels ..... 104
Carbon monoxide in traffic-tunnels—Discussion .....
Charles Evan Fowler.... 47
Car-track areas, block pavements and rail-fillers for...
John S. Crandell.... 318
Casting, what is a ..... 418
Casualty lists, the .....Editorial.... 472
Causes and prevention of accidents in the metal industries ..... 498
Celebes, iron in ..... 482
Cement and concrete, effect of certain substances on the strength and setting-time of..... 201
Cement-concrete, oil-mixed ..... 59
Cement, effect of calcium sulphate on..... 76
Cement for protecting oil pipe-lines..... 59
Centralized State government proposed in Oregon.....
Editorial.... 340
Central-station steam, cost of ..... 283
Centrifugal pumps .....H. S. Budd.... 151
Chamber of Commerce, San Francisco, metal trades and the .....Editorial.... 382
Chimney, tallest, in the world ..... 221
Cinch, anchoring system, the ..... 207
City and county consolidation for Los Angeles..... 8
City managers, resignation of J. A. Hinman of Hanford and T. H. Reed of San Jose.....Editorial.... 214
Clay products, restriction of manufacture of.....
Editorial.... 171
Clear lake, large pumping plant on..... 248
Clear lake pumping plant, agreement for construction of.....Review of the Month.... 216
Clear lake railroad project, the..... 12
Coal gas as a substitute for gasoline..... 220
Coal, the use of powdered.....W. G. Wilcox.... 267
Coke-making plants, by-product..... 231
Commercial aspects of the shale-oil industry.....
J. H. G. Wolf.... 222
Compensation of railroad technical employees.....
Review of the Month.... 131
Compression process for extracting gasoline from natural gas ..... 310
Compressive strength of air-dried timbers, effect of reabsorption of moisture on..I. H. Cowdrey.... 277
Compressor, testing an air.....Walter S. Weeks.... 187
Compressors, gas and gasoline-driven..... 78
Concentrating tables for reclaiming foundry residue... 468
Concrete blocks, effect of alkali soils upon the durability of ..... 77
Concrete bridge construction, recommended practice for 284
Concrete, cleaning stains from..... 74
Concrete fords for crossing intermittent streams..... 32
Concrete for lining mine-shafts ..... 365
Concrete freight-cars .....Editorial.... 297
Concrete highways, good service from.....
Review of the Month.... 300
Concrete highways in Wayne county, cost of maintenance of ..... 99
Concrete houses, construction of standardized..... 102
Concrete, influence of brine on reinforced..... 150
Concrete, influence of proportion of water on.....
Editorial.... 255
Concrete in walls, compacting by jarring forms..... 228
Concrete mixtures, the basic principles of.....
Duff A. Abrams.... 275
Concrete mixtures, method of proportioning based on surface-areas of the aggregates..... 308
Concrete pavement, wear on, in Hartford, Connecticut. 198
Concrete, recognized as a shipbuilding material by the British Board of Trade.....Editorial.... 171
Concrete shipbuilding .....C. K. Forner.... 329
Concrete ship 'Faith', successful trip of..Editorial.... 213
Concrete ships .....Editorial.... 129
Concrete ships, construction of, for the Emergency Fleet Corporation.....R. J. Wig.... 306
Concrete ships, contracts let for.....
Review of the Month.... 257
Concrete ships in Norway.....Editorial....297
Concrete ships, the design of.....H. Devereux.... 343
Ditto.....L. R. Ferguson.... 133
Concrete surfaces, imperfections in ..... 30
Concrete, tables for determining sizes of wooden forms for.....J. J. Rosenthal.... 204
Concrete vessel, the first large..... 134
Concrete-wall construction .....
Conservation of fuel by railway electrification.....
W. D. Bearce.... 104
Consolidation of power companies in California.....
Review of the Month.... 46
Construction of collection and transmission system for Marin municipal water district..... 359
Contingent fees for engineering work.....
Review of the month.... 4
Contracts, cost-plus-percentage, on the Army cantonments .....Review of the Month.... 131
Convention of American Foundrymen's Association at Milwaukee ..... 459
Corrosion of barbed wire..... 114
Corrision of iron and steel, prevention of..... 66
Cost-keeping and construction accounting.....
G. Ed Ross.... 63
Cost of central-station steam..... 283
Cost of construction of eight-inch pipe-line..... 153
Cost of highway maintenance in Maryland..... 30
Cost of operating aeroplanes..... 358
Cost of operation of passenger-elevators..... 99
Cost of pipe-lines in Californian oilfields..... 119
Cost of running automobiles..... 12
Cost-plus-percentage contracts on Army cantonments..
Review of the Month.... 131
Cost-plus-percentage contract on public work, the legal status of the.....Review of the Month.... 87
Costs of highway construction in California..... 144
County fire department, in Napa county, California...
Review of the Month.... 87
County fire departments, organization of, in California
Editorial.... 214
Creosote, resistance of hardwoods to injection with.... 266
Crippled soldiers in the metal industries, opportunities for .....Elsie Plaut.... 448
Cultivating farm-lands, electric power for..... 248
Cupola, a few hints on the.....John Hedley.... 505
Cupola construction ..... 413
Cupola, cubelow, or copula.....Editorial.... 382
Cupola, operation of the.....William Lauten.... 461
Curtailment of production to conserve iron and steel.. 438
Cutting compound, Calol..... 419

D

Dam, failure of part of the Calaveras..... 173
Dam, multiple-arch, withstants overtopping during construction .....H. L. Tilley.... 177
Dam, the Calaveras .....Editorial.... 130
Dam, the San Pablo..... 217
Daylight saving .....Samuel Insull.... 221
Ditto.....Review of the Month....46, 131
Daylight saving, effect of, on demand for electrical energy ..... 307
Deepest well in the world..... 190
Democracy, industrial—Edward J. Fowler.....
Editorial.... 473
Design of concrete ships.....H. Devereux.... 343
Deterioration, Oronite to prevent..... 78
Development of the sand-cast forging-ingot.....
W. L. Booth.... 404
Diagonal roads instead of section-line roads, advantages of ..... 33
Diamond-drills test-borings .....J. A. Wentz.... 34
Diamond-drill hole, a deep..... 221
Dionic water-tester, the..... 264
Disabled men make good in industries..... 487
Displacement-tanks.....Walter S. Weeks.... 24
Downie distillate-hoist ..... 121
Drainage of irrigated lands.....J. L. Burkholder.... 28
Drawbar-pull required for farm tractors..... 134
Drill and tapper, motor-driven..... 329
Drill-steel puncher, the model 10 Waugh..... 331
Drills, twist-, properties of..... 319

E

Earth road, maintenance of.....John H. Mullen.... 220
Earthquake in southern Califronia.....Editorial.... 172
Economics of long-span bridges.....
Charles Evan Fowler.... 239
Economics of steel-arch bridges..... 179
Effect of certain substances on the strength and setting-time of cement and concrete..... 201
Elevators, grain-, country..John W. Cunningham.... 322
Electric annealing ..... 183

Generated on 2024-09-30 01:37 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Pages 63 to 78 mag.in Feb.2019




Page

- welds ..... 321
Electric furnace ..... 29
Electric furnace, cost of melting brass in ..... 99
Electric heating for locomotive boilers ..... 220
Electric locomotives ..... 48
Electric passenger-locomotives for the Chicago, Milwaukee & St. Paul Railroad, powerful ..... 206
Electric power for cultivating farm-lands ..... 248
Electric stimulation of crops ..... 365
Electric welding instead of riveting for shipbuilding .. 228
Electrification, conservation of fuel by railway ..... W. D. Bearce .... 104
Electrolytic action on reinforced concrete trolley-poles 53
Elk Hills oil-land, decision in favor of Southern Pacific Co. ..... Review of the Month .... 215
Embargo on road materials, and ways to meet it ..... Editorial .... 2
Employment Bureau, Federal, for unskilled labor in war industries ..... 320
Employment managers graduate at the University of California ..... A. T. Parsons .... 450
Employment manager, the; a new factor in industrial relationships ..... Edward D. Jones .... 500
Employment managers, training of, under Government auspices ..... 248
Employment Service, U. S., establishes division of engineering ..... Editorial .... 339
Engineering, a united society, for Australia ..... Editorial .... 171
Engineering Council seeks helpers ..... Editorial .... 256
Engineering profession, the status of the ..... 100
Engineering profession, the status of the, and the licensing of engineers ..... Editorial .... 85
Engine for class B military motor truck, design of the A. F. Milbarth .... 140
Engines at the Skandia Pacific plant, quantity production of ..... George N. Somerville .... 429
Equatorial radius of earth ..... 27
Estimating the future production of oil-wells, proposed methods for .. J. O. Lewis and Carl H. Beal .... 105
Etchograph for writing on steel ..... 184
Exchanging or selling Liberty Bonds ..... Review of the Month .... 299
Excluding water from oil-wells, methods of ..... 372
Exemption of engineering students from draft ..... Review of the Month .... 4
Expansion of metals by heat ..... John Roger .... 316
Explosive, tons of stone broken per pound of ..... 35
Express lines, rural motor ..... Editorial .... 213

F

Factors affecting the economic use of irrigating water W. L. Powers .... 30
Failure of part of the Calaveras dam ..... 173
Federal Aid Road Act for 'post roads' only ..... Review of the Month .... 3
Federal Aid road projects in Western States ..... 302
Federal control of railroads ..... Editorial .... 2
Federal Employment Bureau for unskilled labor for war industries ..... 320
Ferro-alloys, the ..... J. W. Richards .... 488
Ferro-manganese in California, making ..... 303
Fire department, county, in Napa county, California ... Review of the Month .... 87
Fire-extinguishing, ammonia for .... A. Schleimer .... 148
Fire losses in United States in 1916 ..... Review of the Month .... 87
Flood-control on Santa Ana river ..... Editorial .... 339
Flue-gases, loss of heat in escaping ..... 358
Food conservation ..... Review of the Month .... 299
Food for the War ..... H. C. Hoover .... 233
Food-saving and Bolshevism ..... Editorial .... 472
Foremen's Club, the ..... 411
Foreign trade extension ..... 486
Forging-ingot, the development of the sand-cast ..... W. L. Booth .... 404
Foundations for engines, diagram for computing ..... 246
Foundry birds ..... 504
Foundrymen's Club of California ..... 460, 509
Foundrywoman, the ..... 482
Freight-car loading, increase of ..... 220
Freight-handling equipment on the San Francisco waterfront, new ..... 444
Freight, shipping-day plan for less-than-carload ..... 445
Fuel-oil in California, movement for saving ..... 273
Fuel-oil regulations ..... Review of the Month .... 88

Page

Fuel, preventable waste of ..... David M. Myers .... 111
Flow of water, effect of mouthpieces on ..... 31
Food conservation ..... Editorial .... 85
Furnaces, high-temperature resistance ..... W. E. Ruder .... 149
Furrow-irrigation, grading land for ..... G. E. P. Smith .... 21

G

Galvanized wire, to give a bright surface to ..... 76
Garabed T. K. Giragossian, energy machine disapproved by committee ..... Editorial .... 297
Garbage, utilization of ..... 323
Gas and gasoline-driven compressors ..... 78
Gas-engine cylinders, temperatures in ..... 280
Gas from peat ..... 7
Gaskets, removal of old ..... 224
Gasoline, coal gas as a substitute for ..... 220
Gasoline for aviation use ... Review of the Month .... 87
Gasoline, the compression process for extracting, from natural gas ..... 310
Gasoline, unsaturated hydrocarbons in ..... 180
Gauges of railroads in North and South America .... 104
Geography, war as a teacher of ..... Editorial .... 426
Get busy ..... 480
Centralized State government proposed in Oregon .... Editorial .... 340
Government railroad of Alaska, the ..... Theodore Pilger .... 67
Graces, the three ..... 410
Grading land for furrow irrigation ..... G. E. P. Smith .... 21
Grain-elevators, country .... John W. Cunningham .... 322
Guards for machinery, built-in .. John R. Brownell .... 398
Guns, American big ..... 184

H

Hardwoods, resistance of, to injection with creosote .. 266
Hay and tar roads on sandy soils ..... 66
Hazards on construction work, machinery ..... J. J. Rosedale .... 317
Heat, loss of, in escaping flue-gases ..... 358
Heat transmission through various building materials 232
Help launch a ship! ..... 163
Help transportation ..... 164
'Hi Carbon' series ..... 439, 480
High cost of living, cabinet officials and .. Editorial .... 472
High-temperature resistance furnaces ..... W. E. Ruder .... 149
Highway Commission, report of the Kern County ..... 181
Highway construction ..... 60
Highway construction in California, costs of ..... 144
Highway construction in war-time ..... 11
Highway construction, material survey an essential of economic ..... H. S. Mattimore .... 224
Highway maintenance in Maryland, cost of ..... 30
Highway system in Merced county, California, proposed bond issue for ..... Review of the Month .... 342
Highways and the War ..... Editorial .... 2
Highways Council, U. S., appointment of ..... Review of the Month .... 257
Highways, increased service from, by means of return-loads bureaus ..... 272
Highways, military ..... Logan Waller Page .... 281
Highways, reinforced concrete .. W. B. Sawyer, Jr .... 225
Hinman, J. A., resignation of, as city manager of Hanford ..... Editorial .... 214
Hoist, Downie distillate ..... 121
Hoisting-ropes ..... M. H. Sigafoos .... 115
Hoisting with steel cables ..... Ernest Levy .... 315
Housing accommodations for war-workers, Government takes steps to provide ..... 406
How it all happened, or the riveter's roundelay ..... 455
Huntington Lake dams, raising the .... H. H. Cox .... 11
Hydraulic jacks ..... 33
Hydraulic-mining debris in the Sierra Nevada ..... G. K. Gilbert .... 5
Hydraulic sluicing for blanketing porous canal-banks .. R. B. Stevens .... 147
Hydro-electric power in northern and central California ..... 97
Hydro-electric power in southern California ..... Review of the Month .... 132

I

Imhoff tanks, operation of ..... George W. Fuller .... 261


539865

Generated on 2024-09-30 01:36 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page

Income tax .....Editorial.... 1
Inductive interference, report on, by California State Railroad Commission ..... 20
Industrial democracy—Edward J. Fowler..... Editorial.... 473
Influenza, 'gas-masks', and Democracy..Editorial.... 427
Inspector, the ..... 402
Inspectors, the ..... 414
Instruments, surveying, being purchased by War Department .....Editorial.... 339
Investigation of water supplies, fallacies in..... H. A. Whittaker.... 33
Iron and Steel, priority orders for..... 324
Iron and steel situation, the..... 507
Iron in Celebes ..... 482
Iron of Lorraine, the.....Editorial.... 384
Iron, pig, from scrap-steel..... 112
Irrigating water, factors affecting the economic use of W. L. Powers.... 30
Irrigation district, the West Side..... 91
Irrigation, grading land for furrow..... G. E. P. Smith.... 21
Irrigation of rice in California..... 245
Irrigation project, the Balmorrhea..V. L. Sullivan.... 53

J

Jacks, hydraulic ..... 32
Jitney-busses, regulated out of business in Los Angeles Review of the Month.... 299
Job-shop and factory ..... 439

K

Kern County Highway Commission, report of the..... 181

L

Labor conditions in war industries.....Editorial.... 44
Labor disputes, settlement of internal, without interference by walking delegates..F. C. Drew.... 383
Labor shortage, methods of meeting the..... H. Kerr Thomas.... 483
Labor, supplying unskilled, handled by U. S. Employment Service .....Editorial.... 298
Lambert conformal conic projection, the..... 139
Land leveling with tractors on the Truckee-Carson project .....F. N. Cronholm.... 142
Latent heat of steam, the..... 266
Leasing bill for oil and coal lands passes U. S. Senate.. Review of the Month.... 45
Leasing bill for withdrawn oil-lands..... Review of the Month.... 215
Legislation regarding water-power development, recommended ..... 118
Letter from the front, a.....396, 494
Letter of application, a model..... 386
Let the women do the work.....D. C. Fessenden.... 434
Leveling land for irrigation..... Review of the Month.... 131
Leveling land on the Truckee-Carson project..... Editorial.... 171
Leveling land with tractors on the Truckee-Carson project.....F. N. Cronholm.... 142
Liberty Bonds, exchanging or selling..... Review of the Month.... 299
Liberty Loan, the Fourth.....Editorial.... 382
Lilberty Loan oversubscribed .....Editorial.... 426
Liberty Loan, the Third.....Editorial.... 129
Licensing of engineers, the status of the engineering profession and the.....Editorial.... 85
Lighthouses maintained by United States..... 184
Limestone, weight of ..... 56
Locomotives, proposed standardization of railway.... 180
Long-span bridges, economics of..... Charles Evan Fowler.... 239
Long-span bridges in America..... 96
Lorraine, the iron of.....Editorial.... 384
Los Angeles, city and county consolidation for..... 8
Lucas, Anthony F., and the Beaumont gusher—An interview.....T. A. Rickard.... 13
Lumber cut in the United States in 1917..... 325

M

Macadam, blowing dust from..... 59
Machinery, built-in guards for..John R. Brownell.... 398
Machinery hazards on construction work..... J. J. Rosedale.... 317
Macy award, the .....Editorial.... 428
Magnetic brakes ..... 291
Mail-service between New York and Washington, establishment of aerial .....Editorial.... 129
Maintenance of earth roads.....John H. Mullen.... 220
Manila rope, preservation of..... 276
Marin Municipal water district, construction of collection and distribution system for..... 359
Material survey and essential for economic highway construction .....H. S. Mattimore.... 224
Metal-planing machine for reinforced concrete..... 221
Metals, expansion of, by heat.....John Roger.... 316
Metal trades and the Chamber of Commerce, the..... Editorial.... 382
Metal Trades, the trade-journal as a factor in creating more and better business ..... 385
Methods of construction of pier No. 3, San Francisco harbor ..... 90
Metric system, adoption of, opposed in Great Britain... 274
Military highways.....Logan Waller Page.... 281
Milling and dividing head for lathes..... 420
Mixer, the Smith 7-S..... 120
Mosquito abatement districts .....Editorial.... 214
Motor-driven drill and tapper..... 329
Motor-truck loads and highways..... Review of the Month.... 300
Motor trucks, Army, driven from Detroit to Atlantic ports .....Editorial.... 1
Motor truck, design of the engine for the class B military .....A. F. Milbarth.... 140
Motor trucks, effect of heavily loaded, on surfaced highways ..... 311
Motor trucks for parcel post..... Review of the Month.... 45
Mouthpieces, effect of, on flow of water..... 31
Multiplication chart.....H. Devereux.... 36
Municipal railroad of San Francisco, annual report of Review of the Month.... 46
Multiple-arch dam withstands overtopping during construction .....H. L. Tilley.... 177

N

Naval reserves, proposed condemnation of land within Review of the Month.... 3
New California shipyard, a.....W. W. Hanscom.... 387
Northern Electric, foreclosure and reorganization of... Editorial.... 213
Northern Electric Co., sale under foreclosure of..... Editorial.... 172
No-voltage release attachment..... 421

O

Oil-bearing area in California..... 200
Oil, increasing the production of, in California..... Discussion .....Walter Stalder.... 175
Oil in pipe-lines, velocity and mixing of..... 199
Oil prices fixed for sale to Allies.....Editorial.... 213
Oil production during 1917, statistics of..... Review of the Month.... 45
Oil production in April....Review of the Month.... 215
Oil production in California in March..... Review of the Month.... 172
Oil production in California for 1917..... Review of the Month.... 3
Oil production in California in June..... Review of the Month.... 341
Oil-land withdrawn from entry..... 76
Oil-mixed cement-concrete ..... 59
Oil statistics for 1917, Californian..... 262
Oil-shale industry, the.....Arthur J. Hoskin.... 191
Oil-shale industry, the Scotch..... 116
Oil, tanks and reservoirs for storing..... 244
Oil transportation systems in California, operated by Federal Fuel Administration ...Editorial.... 171
Oil-wells, methods of excluding water from..... 372
Oil-wells, proposed methods for estimating the future production of..J. O. Lewis and Carl H. Beal.... 105
Oil-wells, reduction of water-infiltration in..... R. P. McLaughlin.... 154
'Open shop' upheld by United States Supreme Court.. Review of the Month.... 4
Operation of the cupola.....William Lauten.... 461
Optical War, an.....Ransom Pratt.... 263


Generated on 2024-09-30 01:33 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page

Oronite to prevent deterioration ..... 78
Our mutual friends, department for friendly discussion 456
Oxy-acetylene process for welding boiler-plate, the.... 185
Oxy-acetylene torch for general repair work..... 467

P

Pacific Coast Waters, lack of charts of..Editorial.... 43
Pacific Electric Railway Co. denied permission to build lines .....Review of the Month.... 131
Panama Canal, traffic on.....Editorial.... 43
Paper packing for pipe-joints..... 76
Paper profits .....Editorial.... 428
Passenger-elevators, cost of operation of..... 99
Patents issued by United States..... 271
Pavements, block, and rail-fillers for car-track areas.. John S. Crandell.... 318
Peat, gas from ..... 7
Peat in United States..... 303
Pennsylvania petroleum, price of.....Editorial.... 85
Philadelphia convention, the..... 416
Photographs, X-ray, for determining internal condition of concrete ..... 143
Pier No. 3, San Francisco harbor, methods of construction of ..... 90
Pig-iron from scrap-steel ..... 112
Pipe-bending machine, a new..... 422
Pipe-line, cost of construction of eight-inch..... 153
Pipe-lines in Californian oilfields, cost of..... 119
Pipe-lines, velocity and mixing of oil in..... 199
Pipe that will not break..... 119
Planing-machine, a large reinforced concrete..... 305
Plowing with tractors ..... 283
Pneumatic calker for wooden ships..... 421
Pneumatic calking machine ..... 264
Portland cement, production of, during 1917..... Review of the Month.... 45
Postal regulations governing second-class matter, proposed increase of rates.....Editorial.... 44
Potash from cement dust..... 23
Potash from flue-dust of blast-furnaces..... 143
Powdered coal, the use of.....W. G. Wilcox.... 267
Powdered coal, air-supply for burning..... 358
Power companies in northern California, combination of, on account of power shortage..... Review of the Month.... 258
Power companies in California, consolidation of..... Review of the Month.... 46
Power, hydro-electric in northern and central California 97
Power in southern California..... Review of the Month.... 132
Power on the Pacific Coast, sources of..... 103
Power, priority schedule for, in northern California... Editorial.... 298
Power shortage in northern California..... Review of the Month.... 341
Power shortage in northern California, steps to avert.. Review of the Month.... 258
Preventable waste of fuel.....David M. Myers.... 111
Priority list issued by War Industries Board, new..408, 496
Priority order No. 2 rescinded.....Editorial.... 43
Priority orders for iron and steel..... 324
Priority schedule for power in northern California.... Editorial.... 298
Profits, paper .....Editorial.... 428
Projection, the Lambert conformal conic..... 139
Propeller-order, a large..... 420
Proportioning concrete mixtures based on the surface-areas of the aggregates..... 308
Publicity and stock-selling..Review of the Month.... 299
Pumping plant on Clear lake, large..... 248
Pumps, centrifugal.....H. S. Budd.... 151
Pumps, characteristics and efficiencies of various types of ..... 75
Purchasing raw material by specification..... Welton J. Crook.... 490
Pyrometer, Bureau of Mines..... 238

Q

Quantity production of engines at the Skandia Pacific plant.....George N. Somerville.... 429
Quarry operations, safety rules for..... 288

R

Railroad accidents, causes of fatalities in..... 96
Railroad, construction of Alaskan.....Editorial.... 171
Railroad construction, small amount during 1917..... Review of the Month.... 45
Railroad engineering near the Western front..... Arthur B. Smith.... 231
Railroads, financial statistics of.....Editorial.... 255
Railroad project, the Clear Lake..... 12
Railroad of Alaska, the Government..... Theodore Pilger.... 67
Railroad rates, increase of..Review of the Month.... 216
Railroad, San Diego and Arizona.....Editorial.... 297
Railroads, Federal control of.....Editorial.... 2
Railroads in North and South America, gauges of..... 104
Railroad ties, life of treated..... 7
Railways, statistics of American..... 280
Raising the Huntington Lake dams....H. H. Cox.... 11
Re-absorption of moisture, effect of, on the compressive strength of air-dried timber..... Irving H. Cowdrey.... 277
Reamer, a handy movable ..... 422
Reclamation of arid, swamp, and logged-off land after the War, proposed by Franklin K. Lane..... Review of the Month.... 215
Red Cross Christmas Roll Call.....Editorial.... 472
Red Cross, American, reconstruction of the injured by 484
Reed, T. H., resignation of, as city manager of San Jose Editorial.... 214
Re-educating disabled soldiers.....Editorial.... 428
Re-education, the vocational, of disabled men..... C. A. Prosser.... 304
Reinforced concrete for protecting corroded steel pipe. 96
Reinforced concrete highways...W. B. Sawyer, Jr.... 225
Reinforced concrete, metal-planing machines of..... 221
Reinforced concrete planing-machine, a large..... 305
Reinforced concrete trolley-poles, electrolytic action on 53
Release attachment, no-voltage..... 421
Relief for oil-operators.....Review of the Month.... 3
Report of the Kern County Highway Commission..... 181
Requa, Mark L., appointment of, as Federal Oil Administrator .....Editorial.... 44
Reservoirs and tanks for storing oil..... 244
Resistance of hardwood to injection with creosote.... 266
Resources and conversion section of War Industries Board ..... 406
Retro-active wage-scales .....Editorial.... 426
Return-load bureaus, increased service from highways by means of .... ..... 272
Rice in California, irrigation of..... 245
Rifle-production by U. S. Ordnance Department..... Editorial.... 255
Rittman and other cracking processes, the..... H. G. James.... 26
Roads, maintenance of earth....John H. Mullen.... 220
Road-oil, asphalt, and tar-products, limitation of use of, by Federal Fuel Administration..... Review of the Month.... 215
Roads on sandy soils, hay-and-tar..... 66
Road-projects, Federal Aid, in Western States..... 302
Roads in China ..... 157
Rock for road-building, crushing strength of..... 312
Ropes, hoisting.....M. H. Sigafoos.... 115
Rope-drive, the longest-lived ..... 90
Rust-prevention process ..... 243

S

Safe buildings and a State building code..... J. J. Rosedale.... 400
Safety rules for quarry operators..... 288
Sand-cast forging ingot, the development of the..... W. L. Booth.... 404
San Diego and Arizona raliroad.....Editorial.... 297
Sanitation, tropical ..... 328
San Francisco waterfront, freight-handling equipment on the ..... 444
San Pablo dam, the ..... 217
Santa Ana river, flood-control on.....Editorial.... 339
Saving fuel-oil in California, movement for..... 273
Schools, training, for shipyard workers..Editorial.... 297
Scotch oil-shale industry, the..... 116
Screw-spikes for railroad track..... 102
Screw-threads, proposed standardization of..... 198
Ditto .....Editorial.... 298
Selective draft law, the new.....Editorial.... 340
Sewage-disposal, acid-process for ..... 276
Sewer-pipe, the strength of ..... 57
Shale-oil industry, commercial aspects of..... J. H. G. Wolf.... 222


Generated on 2024-09-30 01:34 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page

Shipbuilding on the Pacific Coast ..... 301
Shipbuilding record in construction of the destroyer 'Ward' .....Review of the Month.... 257
Shipbuilding, records broken in.....Editorial.... 171
Ships, concrete .....Editorial.... 129
Shipping Board, work of the U. S.....
Edward N. Hurley.... 265
Shipping Board, first annual report of U. S.....
Editorial.... 1
Shipping-day plan for less-than-carload freight..... 445
Ships, present practice in building and launching.....
F. J. French.... 242
Ships, what will become of the.....Editorial.... 427
Shipyard, a new Californian....W. W. Hanscom.... 387
Signal-charts, ship-signals and..... 330
Six-cent street-car fares, upheld in Portland.....
Review of the Month.... 131
Skandia-Pacific plant, quantity production of engines at the.....George N. Somerville.... 429
'Skip-stops' to conserve fuel.....Editorial.... 85
'Slicker', the .....Editorial.... 426
Sluicing for blanketing porous canal-banks, hydraulic
R. B. Stevens.... 147
Smith 7-S mixer, the ..... 120
Snow surveying.....J. E. Church, Jr.... 49
Society, united engineering, for Australia.....
Editorial.... 171
Soldering copper to iron ..... 262
Sources of power on the Pacific Coast..... 103
Specification, purchasing raw material by.....
Welton J. Crook.... 490
Specifications, standard, for cement in Spanish and English .....Editorial.... 298
Splicing wire-rope ..... 313
Spontaneous combustion .....Niles Searles.... 157
Stadia-reduction chart.....E. Earl Glass.... 329
Standardization of railway locomotives, proposed..... 180
Standardization of screw-threads, proposed..... 198
Ditto .....Editorial.... 298
State building code, safe buildings and a.....
J. J. Rosedale.... 400
Status of the engineering profession, the..... 100
Standard specifications for cement in Spanish and English .....Editorial.... 298
Steam, cost of central-station ..... 283
Steam, the latent heat of..... 266
Steel-arch bridges, economics of..... 179
Steel cables, hoisting with.....Ernest Levy.... 315
Steel columns and struts, recommended unit-stresses in 312
Steel production, war ..... 23
Steels, special alloy, in use on the Pacific Coast.....
H. G. Bain.... 502
Steel-wire transmission lines, cost of..... 184
Stock-selling and publicity..Review of the Month.... 299
Storing oil, tanks and reservoirs for..... 244
Street-car fares, six-cent, upheld in Portland.....
Review of the Month.... 131
Street improvements at Vallejo..... 54
Strength of brick piers, the..... 203
Strength of sewer-pipe, the ..... 57
Stone, tons of, broken per pound of explosive..... 35
Submarines, bulletin of Naval Consulting Board concerning .....Review of the Month.... 342
Submerged orifice, the Burnham..... 290
Surface imperfections in concrete ..... 30
Surveying instruments, being purchased by War Department .....Editorial.... 339

T

Tallest chimney in world ..... 221
Tanks and reservoirs for storing oil..... 244
Taxation in California .....Editorial.... 1
Technical employees, railroad, compensation of.....
Review of the Month.... 131
Telephone calls, load-curve of..... 203
Temperature, effect of, on strength of wrought iron... 186
Temperature of gas-engine cylinders..... 280
Ties, life of treated railroad..... 7
Tile, cement, effect of alkali soils on the durability of.. 77
Tires, automobile, standard sizes established for..... 325
Toluol from gas .....Editorial.... 1
Topographic surveys by U. S. Geological Survey..... 76
Tracing cloth for bandages.....Editorial.... 1
Trackless trolleys ..... 231
Tractor and implement show at Davis..... 207
Tractor-engines, cooling of ..... 232

Page

Tractors, farm, drawbar pull required for..... 134
Tractors, plowing with ..... 283
Trade acceptances and the metal industries..... 442
Traffic-carrying capacity of various road surfaces..... 27
Traffic tunnels, carbon monoxide in—Discussion.....
Charles Evan Fowler.... 47
Training-schools for shipyard workers..Editorial.... 297
Transportation help ..... 164
Trenches, materials for military..... 271
Tropical sanitation ..... 328
Trust busting .....Editorial.... 427
Tunnel blasting at Chuquicamata....E. E. Barker.... 366
Tunnel driving at United Verde Extension.....
D. J. O'Rourke.... 246
Tunnel, the 7000-ft., at Lahaina, Hawaii.....
Fr. Koelling.... 259
Twin Peaks tunnel, operation of street-cars commenced through .....Editorial.... 43
Twist-drills, properties of ..... 319

U

Unit-stresses in steel columns and struts, recommended 312
United War Work drive.....Editorial.... 426
U. S. Geological Survey, topographic surveys by..... 76
U. S. Shipping Board, the work of the.....
Edward N. Hurley.... 265
Use of powdered coal, the.....W. G. Wilcox.... 267

V

Vallejo, street improvement at..... 54
Valuation of competitive transportation systems.....
Review of the Month.... 132
Ditto ..... 135
Velocity and mixing of oil in pipe-lines..... 199
V-notch weir measurement .....
D. Robert Yarnell and G. A. Binz.... 158
Vocational re-education of disabled men.....
C. A. Prosser.... 304

W

Wages, unification of ..... 383
Wage-scales, retro-active .....Editorial.... 426
Walking delegates, settlement of internal labor disputes without interference by .....F. C. Drew.... 382
War as a teacher of geography.....Editorial.... 426
War department, construction of emergency buildings for ..... 314
War, highways and the.....Editorial.... 2
War Industries Board, resources and conversion section of ..... 406
War industries, labor conditions in.....Editorial.... 44
War Savings Certificates .....Editorial.... 1
War Savings Stamps .....Editorial.... 129
War-steel production ..... 23
Waste of fuel, preventable.....David M. Myers.... 111
Waste of water from unmetered services.....
Editorial.... 43
Wastes of the West, the.....Minor Chipman....446, 492
Watchmen at industrial plants, need of improved service .....Review of the Month.... 4
Water conditions in Kern River oilfield, improvement of 29
Water-infiltration in oil-wells, reduction of.....
R. P. McLaughlin.... 154
Water-power development, recommended legislation regarding ..... 118
Waterproofing concrete, wash for..... 102
Waterproofing leather ..... 96
Water supplies, fallacies in investigation of.....
H. A. Whittaker.... 33
Water tester, the dionic..... 264
Water transportation in the United States..... 156
Water, waste of, from unmetered services.....
Editorial.... 43
Wear on concrete pavement in Hartford, Connecticut.. 198
Weir-measurement, V-notch..... 158
Welding boiler-plate, the oxy-acetylene process for.... 185
Welding, electric, instead of riveting for shipbuilding.. 228
Welds, electric-arc ..... 321
Well, deepest in the world..... 190
Western front, railroad engineering near the.....
Arthur B. Smith.... 231
West Side irrigation district, the..... 91
What is a casting? ..... 418
Wire, corrosion of barbed..... 114
Wire rope, splicing ..... 313


Generated on 2024-09-30 01:35 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page

Withdrawn oil-land ..... 76
Women, let the, do the work....D. C. Fessenden.... 435
Wooden forms for concrete, tables for determining sizes of .....J. J. Rosedale.... 204
Wooden ships, what is the matter with the..... Editorial.... 473
Wood in motor-truck construction..Charles Kelly.... 249
Wood preservation, methods of..... 77
Ditto .....Editorial.... 129
Work of the U. S. Shipping Board, the..... Edward N. Hurley.... 265
Work or fight .....Editorial.... 382
Wrought-iron, effect of temperature upon the strength of ..... 186

**X**

X-ray photographs for determination of internal condition of concrete ..... 143

**Z**

Zeebrugge affair, the ..... 453


AUTHORS


Abrams, Duff A..... 275
Bain, H. G..... 502
Barker, E. E..... 366
Beal, Carl H..... 105
Bearce, W. D..... 104
Binz, G. A..... 158
Booth, W. L..... 404
Brownell, John R..... 398
Budd, H. S..... 151
Burkholder, J. L..... 28
Champe, S. U..... 326
Chipman, Miner .....446, 492
Church, J. E., Jr..... 49
Cox, H. H..... 11
Cowdrey, Irving H..... 277
Crandell, John S..... 318
Cronholm, F. N..... 142
Crook, Welton J..... 490
Cunningham, John W..... 322
Devereux, H. .....36, 343
Drew, F. C..... 383
Ferguson, L. R..... 133
Fessenden, D. C..... 435
Forner, C. K..... 329
Fowler, Charles Evan.....47, 239
Fowler, Edward J..... 473
French, F. J..... 242
Fuller, George W..... 261
Gilbert, G. K..... 5
Glass, E. Earl..... 329
Hanscom, W. W..... 387
Hedley, John ..... 505
Henderson, C. M.....414, 503
Hoover, H. C..... 233
Hoskin, Arthur J..... 191
Hurley, Edward N..... 265
Insull, Samuel ..... 221
James, H. G..... 26
Jones, Edward D..... 500
Kent, William ..... 117
Kerr, James W.....415, 457
Koelling, Fr..... 259
Lauten, William ..... 461
Levy, Ernest ..... 315
Lewis, J. O..... 105
Mattimore, H. S..... 224
McLaughlin, R. P..... 154
Milbarth, A. F..... 140
Mullen, John H..... 220
Myers, David M..... 111
Page, Logan Waller..... 281
Parsons, A. T..... 450
Pilger, Theodore ..... 67
Plaut, Elsie ..... 448
Powers, W. L..... 30
Pratt, Ransom ..... 263
Prosser, C. A..... 304
Richards, J. W..... 488
Rickard, T. A..... 13
Rosedale, J. J.....204, 317, 400
Roger, John ..... 316
Ross, G. Ed..... 63
Ruder, W. E..... 149
Sawyer, W. B., Jr..... 225
Schleimer, A. ..... 148
Searls, Niles ..... 157
Sigafoos, M. H..... 115
Smith, Arthur B..... 231
Smith, G. E. P..... 21
Somerville, George N..... 429
Stalder, Walter ..... 175
Sullivan, V. L..... 53
Thomas, H. Kerr..... 483
Tilley, H. L..... 177
Weeks, Walter S.....24, 187
Wentz, J. A..... 34
Whittaker, H. A..... 33
Wig, R. J..... 306
Wilcox, W. G..... 267
Wolf, J. H. G..... 222
Yarnell, D. Robert..... 158


Generated on 2024-09-30 01:39 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Generated on 2024-09-30 01:37 GMT / https://hdl.handle.net/2027/uiug.30112007838441
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
UNIVERSITY OF ILLINOIS AT
URBANA-CHAMPAIGN